

Amendments to the Specification:

Please amend the last paragraph beginning at line 22 on page 48 as follows:

FIG. 21 is a block diagram showing an antenna according to this embodiment. The transmission wave W_t output from a transmission section 517 ~~537~~ is delivered to solely an antenna section 510 by means of a circulator 511 shown in FIG. 21.

Please amend the second paragraph beginning at line 12 on page 49 as follows:

The filter section 512 eliminates a received wave W_r and permits passage of only a reflected wave W_f . A mixer 513 mixes the reflected wave W_f with the transmission wave W_t , to thereby extract only a Doppler signal 550 which is shifted in proportion to the travel speed of the vehicle. The Doppler signal 550 is delivered to a Doppler signal processing section 514. Determination means 540 ~~520~~ is essentially made up of the Doppler signal processing section 514, a control section 515, and a comparator 516.